

QP CODE: 25047684



Reg No :

Name :

M.Sc DEGREE (CSS) EXAMINATION, NOVEMBER 2025

Third Semester

M Sc Computer Science (Data Analytics)

ELECTIVE - CA860301 - SOCIAL MEDIA MINING

2020 ADMISSION ONWARDS

5B002619

Time: 3 Hours

Weightage: 30

Part A (Short Answer Questions)

*Answer any **eight** questions.*

Weight 1 each.

1. What is Minimum Spanning Tree? Give real world example.
2. How to model real world network using small world model?
3. What are the tasks involved in data preprocessing?
4. Discuss the terms cohesiveness, separateness and silhouette index in unsupervised learning.
5. Write short note on hierarchical Communities.
6. Explain urn experiment in herd behavior.
7. Describe how the edge-reversal test works. What is it used for?
8. Distinguish between item-based CF recommendation and User based Collaborative Filtering
9. Define Cascade Models?
10. Discuss collective behavior prediction strategy using an example?

(8×1=8 weightage)

Part B (Short Essay/Problems)

*Answer any **six** questions.*

Weight 2 each.

11. Discuss Social atoms, social ties and Degree distribution with example.
12. Describe shortest path algorithms?
13. Explain different classification methods in supervised learning approach??
14. Explain various measures used to evaluate communities when ground truth is available? Give example.
15. Describe information diffusion in social media.





16. Explain the method of homophily modelling.
17. How do we evaluate recommenders?
18. Which are the measures used to calculate similarity in individual behavior prediction?

(6×2=12 weightage)

Part C (Essay Type Questions)

*Answer any **two** questions.*

Weight 5 each.

19. Explain Representation of graph in detail.
20. Discuss in detail about various steps in Knowledge discovery Process with suitable diagram.
21. Describe how networks are evolved?explain community detection in evolving networks.
22. With the help of a case study explain the method of measuring influence of a social media network.

(2×5=10 weightage)

